DOCUMENT RESUME

ED 079 519 VT 020 693

TITLE	Careers for Women in the 70's.
INSTITUTION	Employment Standards Administration (DOL), Washington, D.C. Women's Bureau.
PUB DATE	73
NOTE	16p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. (Catalog No. L36.102:C18, $.35)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Career Opportunities; Career Planning; Careers; *Demand Occupations; *Employment Opportunities; Females; Labor Force; Labor Market; *Manpower Needs; Occupational Aspiration; Occupational Guidance; Occupations; Vocational Counseling; *Working Women

ABSTRACT

Women's opportunities for employment will be directly related to their level of skill and experience but also to the labor market demands through the remainder of the decade. The number of workers needed for all major occupational categories is expected to increase by about one-fifth between 1970 and 1980, but the growth rate will vary by occupational group. Professional and technical workers are expected to have the highest predicted rate (39 percent), followed by service workers (35 percent), clerical workers (26 percent), sales workers (24 percent), craftsmen and foremen (20 percent), managers and administrators (15 percent), and operatives (11 percent). This publication contains a brief discussion and employment information concerning occupations for professional and technical workers, managers and administrators, skilled trades, sales workers, clerical workers, and service workers. In order for women to take advantage of increased labor market demands, employer attitudes toward working women need to change and women must: (1) receive better career planning and counseling, (2) change their career aspirations, and (3) fully utilize the sources of legal protection and assistance which are available to them. (SB)

FILMED FROM BEST AVAILABLE COPY

ED 079519

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CAREERS FOR WOMEN IN THE 70's

UT 070 693

Women's Bureau
Employment Standards Administration
U.S. Department of Labor

1973

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price 35 cents domestic postpaid or 25 cents GPO Bookstore

CAREERS FOR WOMEN IN THE SEVENTIES

Women's opportunities for rewarding employment will be directly related not only to their level of skill and experience but also to the labor market demands through the remainder of the decade. Dynamic changes which significantly affect employment needs are continually taking place in the different segments of our economy—business, industry, government, and education. New ways of making goods, new products, and changes in life styles all exert an influence on the types of jobs that become available. Some of these changes will have short term effects on the labor market; others will be long range.

Therefore, it is difficult to make quantitative predictions about job demands. However, based on the most recent forecasts by the Bureau of Labor Statistics, some projections can be made to help women make realistic plans for careers in which openings will be available, in which they can more fully utilize their skills, and in which they can earn better wages. In order to become competitive for the more challenging jobs with advancement possibilities, women and girls should plan to train for nontraditional as well as traditional occupations.

CHANGES IN MAJOR OCCUPATION GROUPS

The movement from a production-based to a service-based economy will continue in the 1970's. The number of workers needed for all major occupation categories is expected to increase by about one-fifth between 1970 and 1980. But the growth rate will vary by occupation group.

The group with the highest predicted growth rate between 1970 and 1980 is that of professional and technical workers, estimated to increase by 39 percent. The group with the second highest anticipated growth rate is that of service workers (35 percent), followed by clerical workers (26 percent), sales workers (24 percent), craftsmen and foremen (20 percent), managers and administrators (15 percent), and operatives (11 percent). The estimated number of annual job openings for these groups is as follows:

Professional and technical workers	864,400
Service workers	877,000
Clerical workers	1,220,000
Sales workers	298,200
Craftsmen and foremen (skilled trades)	462,900
Managers and administrators	413,000
Operatives	515,800

On the other hand, the demand for nonfarm laborers and farm workers is expected to decline. Just as important, perhaps, as the variation in growth by major occupation groups will be the change in demand for specific occupations within the various groups.

PROFESSIONAL AND TECHNICAL WORKERS

The demand for professional and technical workers—female as well as male—is expected to be strong during the seventies. Many of the occupations in this group have both a shortage of qualified workers and a comparatively small number of women. Women who choose to work in professional or technical jobs will enjoy the benefits of higher earnings that accompany these occupations and will have better chances for advancement. Continued enforcement of the laws against sex discrimination in employment and changing social customs will provide women the mechanism to compete for jobs heretofore thought of as primarily for men.

Professionals

The professional occupations are those which generally require at least a college education. Many employment opportunities will be open to women who are prepared for professional positions outside the narrow range in which they are now concentrated. The number of workers is expected to increase rapidly in the following occupations by 1980:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Employment counselor	8,000	50	1,100
Marketing research worker	23,000	*	2,600
Occupational therapist	7,500	90	1,150
Physical therapist	15,000	66	1,600
Programmer	200,000	**	34,700
Systems analyst	100,000	**	22,700
Urban planner	8,000	**	750

*Majority are men.
**Data are not available.

Other professional occupations in which a large number of openings are expected annually are:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Accountant	491,000	20	31,200
Architect	33,000	4	2,700
Chemist	137,000	7	9,400
Civil engineer	185,000	*	10,000
Dentist	103,000	2	5,400
Dietitian	30,000	90	2,300
Economist	33,000	10	2,300
Electrical engineer	235,000	*	12,200
Industrial engineer	125,000	*	8,000
Life scientist	180,000	10	9,900
Mathematician	75,000	10	4,600
Medical record librarian	13,000	***	1,500
Medical technologist[1]			
Personnel worker	160,000	25	9,100
Physician	305,000	7	22,000
Physicist	48,000	4	3,500
Psychologist	40,000	25	3,700
Public relations worker	75,000	25	4,400
Recreation worker	13,500	50	1,700
Registered nurse	700,000	99	69,000
Rehabilitation counselor	13,000	30	1,600
School counselor	54,000	**	5,200
Social worker	170,000	**	18,000
Speech pathologist and audiologist	22,000	75	2,200
Statistician	24,000	33	1,400
Veterinarian	25,000	2	1,500

[1] Included with medical laboratory workers on page 4.
*Majority are men.
**Data are not available.
***Majority are women.

Technicians

Technicians perform in a supportive capacity. They assist and work closely with various professionals such as engineers, scientists, mathematicians, physicians, and dentists. Qualified women technicians will find opportunities expanding in these fields. Most technical jobs require post-secondary school training but less than 4 years of college. Further, about 80 percent of the jobs to be filled during the seventies will not require a college degree. Some of the technical occupations which offer good prospects are:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Draftsman	310,600	4	16,360
Engineering and science technician	650,000	11	33,000
Food processing technician	3,400	**	150

With an increasing demand for more and better health care, there will be a need for many workers in the usual technical jobs in the health fields. These include:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Dental assistant	91,000	***	9,200
Dental hygienist	16,000	***	3,100
Electrocardiographic (EKG) technician	9,500	***	1,600
Medical assistant	175,000	80	20,000
Medical laboratory workers:			
Medical laboratory assistant Medical laboratory technician Medical technologist	110,000	80 to 90	13,500
Radiologic technologist	80,000	66	7,700

**Data are not available.
***Majority are women.

In addition, there will be a demand for workers in some of the new and developing technical health occupations. These specialties may provide exciting challenges to young women as well as to mature women who want to shift to some other career midway in their worklife. Included are:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Electroencephalographic (EEG) technician	3,000	***	950
Inhalation therapist	10,000	**	2,100
Occupational therapy assistant	6,000	***	1,300
Optometric assistant	3,000	***	300
Physical therapy assistant	10,000	50	2,200
Surgical technician	25,000	***	2,600

Other Professional and Technical Occupations

Changes in national priorities, in addition to changes in social and economic situations, have great impact on the creation of new programs and the expansion of occupational specialties. In this regard, the pressure to clean up, restore, and conserve the environment will provide opportunities with an excellent outlook for a variety of professional and technical workers. On the other hand, opportunities vary in some of the professions that have employed large numbers in the past. For example, the outlook is mixed in the 1970's for engineers, lawyers, teachers, and the liberal arts graduate without a specialty.

Environmental protection.—Much of the responsibility for solving problems related to air, soil, and water pollution will be left to environmental scientists—geologists, geophysicists, meteorologists, and oceanographers—and to other natural scientists. Qualified wastewater treatment plant operators will be much in demand. Environmental technicians will be needed for work related to radiation protection, pesticides, rodent control, and industrial hygiene. In addition, technicians will be needed to operate, maintain, and repair equipment used in water pollution control studies.

Various disciplines outside the fields of science and technology are useful in furthering the cause of environmental management. For example, the evolving fields of environmental law, environmental engineering, and environmental journalism are expected to offer numerous opportunities.

**Data are not available.
***Majority are women.

Engineering.—The growth rate for the field of engineering will be slower in the 1970's than in the 1960's, but will continue to increase despite current employment difficulties, particularly for workers in the aerospace industry. Demand is expected to be strong for engineers versed in computer applications and for those who can apply engineering principles to medicine, biology, and other sciences. The proportion of engineers who are women is extremely small—less than 1 percent. The applications of engineering know-how are numerous and, based on tests, many girls have the necessary aptitude for this occupation.

Law.—The number of women students enrolled in law school in the fall of 1971 was six times greater than in 1961—an increase from 1,497 to 8,914. More time is needed, however, to determine any noticeable change in the number of women lawyers, since most of the enrollment increases have occurred during the past 3 years. While women law students constituted 9.4 percent of all law students in 1971, women were only about 4 percent of the total number of lawyers.

Between 1970 and 1980, the average annual openings for lawyers is estimated at 14,700. Growth in demand will stem from business expansion and the increased use of legal services by low- and middle-income groups. For graduates of outstanding law schools or those who rank high in their classes, prospects will be good in salaried positions with well-known law firms and as law clerks to judges. This is a cue for women to be ready to face keen competition if they wish to enjoy expanding career opportunities. However, in some large metropolitan areas women are finding good job opportunities, especially where firms feel the pressure to increase the proportion of women employed.

Education.—The demand in the seventies will be different from that in the sixties. There is expected to be a decline in the need for elementary and secondary school teachers, except in specialties such as early childhood development, remedial education, and programs for the handicapped or underprivileged. The number of persons trained as elementary and secondary school teachers could exceed the demand. Because of the anticipated decrease, individuals interested in careers in education might want to explore various other possibilities. In the area of administration, persons with a talent for and interest in organization and management may enjoy careers as educational buyers, budget planners, personnel workers, and public relations directors. In the area of pupil personnel services, psychologists, social workers, and counselors will be needed. As schools increase their use of mechanical devices, experts will be needed to provide technical services, such as those provided by audiovisual specialists.

For college and university teachers, there are good employment prospects at 4-year colleges for those who have doctorate degrees and at 2-year colleges for those who have master's degrees.

Liberal arts.—Some employers may shy away from liberal arts graduates in the belief that they lack immediately usable job skills as compared with graduates of professional and technical programs. However, liberal arts students may improve their chances of finding good jobs later by developing career goals as early as possible, by getting related summer job experience, and by participating in extracurricular activities that involve related interests. A few of the fields open to persons with bachelor of arts degrees are banking, government, insurance, personnel administration, public relations, and sales.

Physician's assistant.—An emerging occupation in the medical field is that of physician's assistant. The concept of the occupation is seen as a means of extending adequate patient care while alleviating the critical shortage of physicians, since the physician's assistant performs many of the routine duties usually carried out only by the physician. Some college training is required but there are variations in the approximately 40 programs currently in operation. Data on the number of women preparing for this career are not yet published, but women should certainly consider this field when looking at future job prospects as part of the professional health service team. There is also the possibility that the medical background acquired by the physician's assistant could be a steppingstone to further preparation to become a physician.

MANAGERS AND ADMINISTRATORS

The entire managerial field is expected to offer a wide variety of opportunities where women may be able to use their training and special talents. Occupations which offer good prospects include purchasing agent, bank officer, and city manager. Rapid employment growth is expected for bank officers, and opportunities as city managers are excellent for persons with master's degrees in public or municipal administration.

Women have often been excluded from mid-level and executive-level management positions in the past. But since new Federal legislation has expanded coverage and strengthened the enforcement of provisions which prohibit sex discrimination, employers will need to review the access of women to management training programs as well as to jobs at all levels. Specifically, Revised Order No. 4, which implements an Executive order for Federal contractors and subcontractors, requires them to develop written affirmative action plans for recruiting, hiring, training, and promoting women. The order is already having impact on the hiring policies of some companies, and they are beginning to expand executive opportunities for women. Some employers, who have curtailed their hiring because of economic conditions, may comply with the order by more fully utilizing their present women employees and increasing their promotion opportunities. Furthermore, as companies increase their involvement in the affairs of the community, they may find in women managers or trainees the special skills which rapport with the community and its needs will require.

SKILLED TRADES

The outlook for workers in the skilled trades and apprentice-type jobs is very good. This is also an area in which women are greatly underrepresented, yet many women have the necessary aptitudes and potential skills. Since physical strength is becoming less of a factor for many skilled jobs, and since the earnings are relatively high, the interest among women is increasing for craft jobs. Some of the skilled occupations in which a rapid employment increase is expected are:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Air conditioning, refrigeration, and heating mechanic	115,000	**	7,900
Aircraft mechanic	140,000	**	6,000
Appliance serviceman	220,000	**	11,000
Automobile mechanic	610,000	**	23,300
Business machine serviceman	80,000	**	6,000
Electrician (construction)	190,000	**	12,000
Industrial machinery repairman	180,000	**	9,000
Instrument maker—mechanical	8,000	**	400
Instrument repairman	95,000	**	5,900
Operating engineer (construction machinery operator)	310,000	**	15,000
Plumber and pipefitter	350,000	**	20,000
Television and radio service technician	132,000	**	4,500
Truck and bus mechanic	115,000	**	5,200

CLERICAL WORKERS

Employment in the clerical field, where more than 7 out of 10 workers are women, is expected to increase more than one-fourth by 1980. However, growth will be limited for certain types of workers, such as those who prepare payrolls and customer billing, as electronic computers come into wider usage.

Clerical workers represent a wide variety of skills and experience. There are highly skilled title searchers and examiners in real estate firms and executive secretaries in business

**Data are not available.

offices, in addition to traditional jobs as secretaries, typists, bookkeepers, and accounting clerks. On the other hand, occupations such as messengers and file clerks require little or no training or experience.

One of the best prospects is for *electronic computer operating personnel*, where employment is expected to increase very rapidly through the 1970's and the salary is near the top for clerical jobs. Other occupations with a favorable outlook include:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Cashier	847,000	90	64,000
Claim adjuster	114,000	*	4,500
Library technician	76,000	80	7,200
Traffic agent and clerk (civil aviation)	45,000	**	4,800

SALES WORKERS

The occupations involving sales cut across a wide range of retail and wholesale businesses, and require varying levels of expertise and responsibility. A high school diploma is generally preferred for routine sales jobs. However, specialized training or college degrees may be required for sales representatives of companies dealing in complex products and services.

Of the 4.9 million persons in sales occupations in 1970, women constituted more than 2 out of 5 of these workers. Approximately 3 out of 10 sales employees worked on part-time schedules, but nearly half of the women sales workers were working part time. Women sales workers are employed mainly in retail stores and usually sell the less expensive items such as hosiery and gloves rather than refrigerators, furniture, and automobiles, which generally yield commissions. Furthermore, men constitute the great majority of employees

*Majority are men.
**Data are not available.

in real estate, insurance, and other sales work outside of retail stores. Some of the sales jobs which offer challenging opportunities and have a favorable outlook are:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Insurance agent and broker	350,000	10	19,000
Manufacturers' salesman	510,000	10	25,000
Real estate salesman and broker	226,000	40	14,800
Securities salesman	200,000	*	11,800
Wholesale trade sales worker	539,000	*	27,700

SERVICE WORKERS

Service work, after clerical, is the second largest occupation group in which women are employed. Jobs for which the demand will be strong are:

	Total employment, 1970	Women as percent of total	Average annual openings to 1980
Cosmetologist	484,000	90	43,000
Hospital attendant	830,000	80	111,000
Licensed practical nurse	370,000	***	58,000
State police officer	41,000	*	2,900
Stewardess	35,600	***	**

The need for *private household workers* will also be great as family incomes rise and as larger numbers of women work outside the home. However, until improvement in working conditions and pay are achieved for these workers, there is little incentive for them to seek such employment. Also, if more training facilities were available and career ladders developed so that workers could advance, more women might be willing to enter this field of work. A new law which allows working parents with incomes up to $27,600 to deduct up to $400 a month expenses for household services (which might include care of children and/or incapacitated dependents and home cleaning) could stimulate better wages and related benefits.

*Majority are men.
**Data are not available.
***Majority are women.

CONCLUSIONS

In essence, careers for women should not be any different from careers for men. Decisions with respect to gainful and satisfying employment for women should be made on the basis of occupational outlook and the demand for workers in the growth occupations as well as on individual interests and capabilities. Just how women can capitalize on the growth occupation demands will depend on a variety of factors.

First, women need better career planning and counseling. They should be encouraged to develop personal goals based upon occupational information that will enable them to compete for good jobs in light of their abilities, desires, and training. Career guidance should begin at the junior high school level, or even at the elementary school level, with the assistance of counselors, teachers, and parents.

Second, some women must change their career aspirations. Since openings in the usual "women's" occupations will not be sufficient to supply jobs for all women seeking work, they must choose alternatives in nontraditional occupations. Many of these jobs pay higher wages and offer greater opportunities for promotion. In the past, too many women were forced to settle for second best in jobs. Others were willing to settle for the lesser jobs because they felt that their stay in the labor force would be temporary. However, the situation is changing as more and more women become aware of the probability of combining the roles of wife, mother, and homemaker with that of paid worker.

Third, women must fully utilize the sources of legal protection and assistance which are available to them. Strong laws against discrimination in employment on the basis of sex are on the books. Having the legislation, however, is not enough. It is up to women to press for enforcement of the laws where necessary. "Affirmative action," in accordance with the requirements of Revised Order No. 4, will enhance the entry of women into many fields previously "reserved" for men. This should help speed up the process of eliminating the discriminatory and illegal sex labels attached to jobs.

Fourth, and possibly one of the most difficult areas to deal with, is the need to change employer attitudes with respect to women's roles and desire to work. Perhaps the overriding factors in this regard are the myths that employers, policymakers, and others in our society have unfairly associated with the worklife patterns of women. One such myth is that women are not seriously attached to the labor force, as they work only for "pocket money." However, of the 33 million women in the labor force in March 1972, more than half were working because of pressing economic need. These women comprise a group who are either single, widowed, divorced, separated, or married to men with incomes of less than $5,000 a year. Women constitute nearly two-fifths of the work force. However, because of foregone conclusions about their interests and capabilities, women are disproportionately restricted in

the kinds of jobs they hold. Their concentration in the less rewarding, lower paying occupations provides them with fewer chances for advancement.

On the other hand, some progress is being made concerning employer attitudes. In contrast to the practices of just a few years ago when most companies did not actively recruit college women but employed a few upon application, many companies are now seeking positive ways to establish equal opportunity programs. Some companies have indicated that they would hire more college women if they were qualified for the fields of accounting, engineering, data processing, mathematics, general business, chemistry, marketing, and economics (finance). Many women do not prepare for these fields because they lack the necessary background, having been channeled away from advanced (and sometimes even basic) courses in mathematics and science while in high school. Girls should, therefore, include more of these fundamentals to provide them with an adequate background to prepare for better employment opportunities in the future.

The concept of personal choice in the world of work will begin to become a reality when all concerned—for example, the guidance counselor, the shop teacher, the plant employer, and women themselves—are able to develop an appreciation for the differences in personal abilities and desires. This should have great impact for the girl who grew up helping her father do the car or tractor repairs and has a knack for this kind of work. Why shouldn't she work as and receive the pay of a mechanic? And in speaking of individual differences, it goes a step further, too—if a man likes caring for the sick, why shouldn't he become a nurse?

REFERENCES

Educational Programs for the Physician's Assistant. American Medical Association, Council on Medical Education. September 1972.

The Employment of College Women—1971 Classes. Excerpts from Trends in Employment of College and University Graduates in Business and Industry, 1971. Frank S. Endicott. Northwestern University, Evanston, Ill. December 1970.

Opportunities in Environmental Careers. Odom Fanning. Educational Books Division of Universal Publishing and Distributing Corp. New York, N.Y. 1971.

The Potential of Women. Congressional Record, September 8, 1971.

U.S. Department of Health, Education, and Welfare, Office of Education. Career Education. OE-72-39. 1971.

U.S. Department of Labor, Bureau of Labor Statistics:
Occupational Manpower and Training Needs. Bull. 1701. 1971.

Occupational Outlook Handbook. Bull. 1700. 1972-73 Edition.

Occupational Outlook Quarterly. Spring 1972. Vol. 16, No. 1.

Occupational Outlook Quarterly. Winter 1971. Vol. 15, No. 4.

Occupational Outlook Quarterly. Winter 1970. Vol. 14, No. 4.

Women at Work—Women Workers and Manpower Demands in the 1970's. Janice N. Hedges. Monthly Labor Review, June 1970.

U.S. Department of Labor, Employment Standards Administration, Women's Bureau:
Education Act Extends Sex Discrimination and Minimum Wage Provisions. Legislative Series 2. July 1972.

Household Employment: The Quiet Revolution. Speech by Elizabeth Duncan Koontz at the Northern Virginia Conference on Household Employment, Alexandria, Va., April 14, 1969.

Laws on Sex Discrimination in Employment: Federal Civil Rights Act, Title VII—State Fair Employment Practices Laws—Executive Orders. 1970.

The Myth and the Reality. March 1972.

New Horizons: Household Employment and the Home-Related Arts. Speech by Elizabeth Duncan Koontz at the Conference on Consumer and Homemaking Education, Anaheim, Calif., November 1970.

New Law Liberalizes Child Care Deductions. Legislative Series 1. January 20, 1972.

Women in Engineering—Bridging the Gap Between Engineering and Society. Speech by Elizabeth Duncan Koontz at the 1971 Engineering Foundation Conference, Henniker, N.H., July 14, 1971.

Women Get a Lift From Order No. 4. Business Week, April 1972.

☆ U. S. GOVERNMENT PRINTING OFFICE : 1973 O - 512-381 (77)